

161936

Tuesday, May 23, 2017 11:03:18 AM

N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 5/31/2017 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 6/2/2017 **Req'd Qty:** 2.00 ***?***

Customer:

Reference:

DAS
21

Approvals: _____ **Process Plan:** _____ **9-89** **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: MAY 24 2017 SPC (Y/N): _____ Date: _____

Stop *NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		☐ OTHER : _____							

Work Order ID 161936

Tuesday, May 23, 2017 11:03:18 AM

161936

Page 2

Item ID: D412-698-015

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Door Support - V Block

Start Date: 5/31/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/2/2017 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: _____	0.00							
130	Packaging					2	DAS 28 9-89		MAY 31 2017
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D412-698-015 Location: FG022								
140	QC21- Final Inspection - Work Order Release	0.00							
140							DAS 21 9-89		JUN 01 2017
QC	Memo	0.20							
Quality Control									

DAS
21
9-89 JUN 01 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
								OTHER :	

Picklist Print

Tuesday, May 23, 2017 11:03:16 AM

Page 1

Work Order ID: 161936

161936

Parent Item: D412-698-015

D412-698-015

Parent Item Name: Door Support - V Block

Start Date: 5/31/2017

Required Date: 6/2/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:C Removed Manufacturing 06-01-25 JLM
IPP Rev:D change to rev D ECN 1104 08-01-28 DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3200-1 *D3200-1* Door Post Block		Manufactured	No			110	Each	17.0000	2 **	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST022		17							
				146705		2							
				156307		15							
D3200-3 *D3200-3* Door Wedge		Manufactured	No			110	Each	24.0000	2 **	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST023		24							
				155563		24							
D3201-1 *D3201-1* Doubler		Manufactured	No			110	Each	10.0000	2 **	4			
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				ST023		10							
				149565		1							
				156264		4							
				158431		5							

DAS
27
9-89

MAY 31 2017

DAS
26
9-89

MAY 3 2017

DAS
27
9-89

DAS
26
9-89

MAY 3 2017

DAS
27
9-89

DAS
26
9-89

MAY 3 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : ☐							

Picklist Print

Tuesday, May 23, 2017 11:03:17 AM

Page 2

Work Order ID: 161936

161936

Parent Item: D412-698-015

D412-698-015

Parent Item Name: Door Support - V Block

Start Date: 5/31/2017

Required Date: 6/2/2017

Start Qty: 2.00

Required Qty: 2.00

D3201-3 Manufactured No

110

Each

8.0000

1

2

D3201-3

Angle

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST023

8

140937

5

158432

3

2x

D3201-4 Manufactured No

110

Each

9.0000

1

2

D3201-4

Angle

**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST023

9

155564

5

158430

4

2x

MS21042L3 Purchased No

110

Each

1,931.000

12

24

MS21042L3

Nut

**

AS
28
89

Location

Loc Qty

Loc Code

CCK007

1000

m137495

1000

FP001

91

m135945

91

GA

460

m134360

102

M136665

358

ST303

380

m137321

380

24x

DAS
26
9-89

DAS
27
9-89

MAY 3 2017

DAS
26
9-89

DAS
27
9-89

MAY 3 2017

DAS
26
9-89

DAS
27
9-89

MAY 3 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Picklist Print

Tuesday, May 23, 2017 11:03:17 AM

Work Order ID: 161936

161936

Parent Item: D412-698-015

D412-698-015

Parent Item Name: Door Support - V Block

Start Date: 5/31/2017

Required Date: 6/2/2017

Start Qty: 2.00

Required Qty: 2.00

MS24693-S277

Purchased

No

110

Each

104.0000

12

24

MS24693-S277

Screw

**

MAY 3 2017

Location

Loc Qty

Loc Code

ST286

104

M135408

4

M136851

50

M137178

50

14x
15x

DAS
28
9-89

NAS1149D0332J

Purchased

No

110

Each

1,366.000

12

24

NAS1149D0332.J

Washer

**

MAY 3 2017

Location

Loc Qty

Loc Code

FP

241

m136015

8

m137075

233

GA

332

m136643

332

ST264

793

m136015

0

m137412

793

24x

DAS
28
9-89

DAS
26
9-89

DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER : ☐							

7.0 PARTS LIST - PILOT DOOR MODIFICATION KITS

Qty -015	Qty -023	Part Number	Description
X		D412-698-015	DOOR SUPPORT KIT
	X	D412-698-023	AUTOMATIC DOOR OPENER KIT
2		D3200-1	DOOR POST BLOCK
2		D3200-3	DOOR WEDGE
2		D3201-1	DOUBLER
1		D3201-3	ANGLE
1		D3201-4	ANGLE
	1	D3552-11	GAS SPRING
	1	D3594-5	DOOR DOUBLER
	1	D3594-043	FLOOR DOUBLER ASSEMBLY, LH
	1	D3594-044	FLOOR DOUBLER ASSEMBLY, RH
	2	D3622-1	BALL STUD
	1	MS21073L5	ANCHOR NUT
	2	MS20426AD4-4	RIVET
12		NAS1149D0332J	WASHER (AN960JD10L)
	2	NAS1149D0516J	WASHER (AN960JD516L)
12		MS21042L3	NUT (OR MS21042-3)
12		MS24693-S277	SCREW

Work Order ID 161936

Tuesday, May 23, 2017 11:03:18 AM

161936

Page 1

Item ID: D412-698-015

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Door Support - V Block

Start Date: 5/31/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 6/2/2017 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
IIN D412-698	F

100

Document Control

0.00

100

DC

DOCUMENT CONTROL

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile and create labels per PPP D412-698-015 CHG001

CB

2

MAY 31 2017

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.06

Quality Control



Transport Canada Transports Canada

Department of Transport

Supplemental Type Certificate

This approval is issued to:

Eagle Copters Ltd.
823 McTavish Road N.E.
Calgary, Alberta
Canada T2E 7G9

Number: SH92-43

Issue No.: 5

Approval Date: August 26, 1992

Issue Date: September 14, 2007

Responsible Office:

Prairie and Northern

Aircraft/Engine Type or Model:

BELL 204B, 205A, 205A-1, 205B, 212, 214B, 214B-1, 412, 412 CF, 412 EP

Canadian Type Certificate or Equivalent:

BELL 205B H-104
BELL 214B, 214B-1 H-80
BELL 212, 412, 412 CF, 412 EP H-86
BELL 204B, 205A, 205A-1 H1SW

Description of Type Design Change:

Serviceability Kit: Aux Cowl latches, cockpit door wear pads, cabin door handle, sliding door roller system and automatic door opener kit

**Installation/Operating Data,
Required Equipment and Limitations:**

Configuration 1:

Installation of Serviceability Kit to be done in accordance with DOT approved Aero Design Ltd., Document Control List A-85-DCL1, Revision 1, dated 27 January 1997, or later approved Revision.

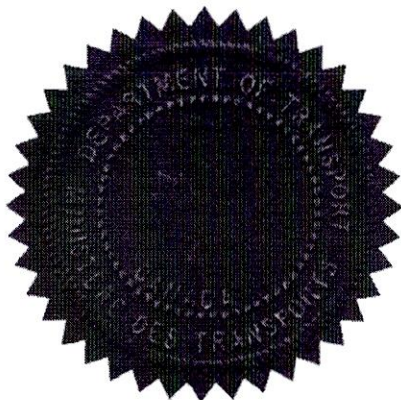
Configuration 2:

Installation of Door Modification Kits to be done in accordance with Transport Canada (TC) approved Dart Aerospace Ltd. Installation Instructions IIN-D412-698, Revision D or later TC approved revision.

Inspection of Door Modification Kits is to be performed in accordance with Dart Aerospace Ltd. Instructions for Continued Airworthiness ICA-D412-698, Revision 3 or later TC accepted revision.

-END-

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.




Greg Oucharek
Senior Aircraft Certification Engineer
For Minister of Transport

Canada